UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. John Backus
Water Quality Standards Section
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

FEB 0 9 2012

Dear Mr. Backus:

I am pleased to offer comments in on the proposed Revision to Regulation .03-3 under COMAR 26.08.02 Water Quality which was published in the Maryland Register on January 13, 2012.

The proposed Revision includes two specific changes:

(1) Establish a dissolved oxygen (DO) criteria restoration variance of 2% non-attainment by volume and duration for the seasonal deep channel refuge use of the Eastern Bay Mesohaline (EASMH) segment.

(2) Increase the DO restoration variance for the seasonal deep channel refuge use of the Lower Chester River Mesohaline (CHSMH) from 14% to 16% non-attainment by volume and duration and move (recodify) this subparagraph to the appropriate paragraph.

Maryland's proposed amended water quality standards reflect improved scientific understanding of the Chesapeake Bay water quality responses and are products of the continuing scientific collaboration between Maryland and U.S. Environmental Protection Agency (EPA).

For the Eastern Bay Mesohaline segment, the water quality was analyzed by running the Phase II Watershed Implementation Plan Planning Targets loads through the updated Bay water quality model. That analysis indicated that the deep channel leading from the mainstem Bay CB4MH segment (which currently has a DO restoration variance of 2% of the seasonal deep channel refuge use) into the Eastern Bay deep channel would be 2% non-attainment of Maryland's applicable DO criterion measured by volume and duration of the seasonal deep channel use. This portion of the deep channel, starting in the CB4 segment and entering into the deep channel portion of the Eastern Bay segment, is considered part of the Eastern Bay segment due to the artificial segment boundary based on the 'mouth' of Eastern Bay. EPA and Maryland scientists have evaluated the hydrodynamic, water quality and bathymetric connections between the mainstem Bay and Eastern Bay through the shared deep channel, and have assessed the patterns of attainment between deep water and deep channel designated uses of these segments. As a result of these analyses, Maryland has proposed this restoration variance for the Eastern Bay seasonal deep channel designated use similar to that in place for the restoration use for CB4MH segment's deep channel designated use.

In the Lower Chester River Mesohaline, the water quality was likewise projected by running the Phase II Watershed Implementation Plan Planning Targets loads through the updated Bay water quality model. Even after reducing loads to the Phase II planning targets, the physical conditions present in the lower Chester River's deep channel are still likely to prevent full attainment of Maryland's applicable DO criterion in the deep channel. Updated Bay models now represent that nonattainment of the applicable DO criteria would be at a slightly higher level (16%) than the original 14 % of the deep channel refuge use. That 14% variance was included in a water quality standards amendment adopted and approved by EPA in 2010. Accordingly, Maryland now proposes this revision to this previously approved action.

As defined by Maryland in state regulations, these proposed revisions would define the allowable exceedance of a specific water quality criteria based on the best available scientific understanding consistent with Clean Water Act requirements. The revisions are temporary and will be reviewed at a minimum of every three years, as required by the Clean Water Act and EPA regulations, and may be modified based on new scientific findings.

Based on the current information presented, the proposed revisions appear to be consistent with the latest information and understanding of the water quality responses in the Chesapeake Bay.

Please note that the positions described in our comments above are preliminary in nature and do not constitute a final decision by EPA under Clean Water Act § 303(c). Approval/disapproval decisions will be made by the Region following adoption of new/revised standards by the state and submittal to EPA. Any determination pursuant to Clean Water Act § 303(c)(4)(B) may only be made by the Administrator.

Sincerely,

Larry Merrill

Larry Merrill, Associate Director
Office of Standards, Assessment and
Total Maximum Daily Loads